

REMARKS/ARGUMENTS

Claims 2, 5-6 and 8-9 have been amended, and claim 12 has been added to the application. The amendment has been made in order to ensure compliance of this application with United States patent practice, as the present application is based upon a foreign counterpart. The amendment has also been made to correct the dependencies of the claims and to eliminate several of the multiple dependencies. The scope of the invention as embodied in the claims has not been altered.

None of pending claims 1-12 has been substantively amended, as each defines patentable subject matter in its present form.

Applicant's Invention

Applicant's invention is directed to an apparatus for delivering an electrical defibrillating signal to a human heart in the state of atrial defibrillation. The apparatus uses transdermal energy transferred from an external source to an implanted receiving device. The implanted receiving device includes an induction receiving coil for receiving the pulse from the external circuit, and a rectification circuit having an input connected to the receiving coil and an output driving electrodes implantable in the heart. Implantable atrial defibrillators have been attempted in the prior art. The complexity of these devices however often requires onboard pattern recognition with complex recording and follow-up procedures. There has also been a need for electrical charging circuitry using active devices which has added to the complexity, weight, and bulk of the implanted device. Applicants' invention provides a defibrillator capable of transferring transdermally the power necessary to stimulate a fibrillating heart in a more spatially practical embodiment.

Cited Prior Art

U.S. Patent No. 6,016,449 (Fischell et al.)

The Fischell patent is directed to a multiple electrode, closed loop system for the treatment of certain neurological diseases such as epilepsy, migraine headaches, and

Parkinson's disease. Fischell's device is directed to achieving reliable detection of the onset of a neurological event originating from a focus of limited spatial extent within the brain, and the coordination of electrical stimuli designed to terminate the neurological event immediately upon its onset. To this end, Fischell consists of a multiplicity of brain electrodes placed either within the brain, on the surface of the brain itself, or on the dura matter that surrounds the brain. A control module 20 as seen in FIG. 1 is connected to various electrodes through connectors. Fischell is specifically a responsive detection and stimulation system for the early recognition and prompt treatment of a neurological event in the brain.

U.S. Patent No. 5,697,958 (Paul et al.)

The Paul patent is directed to an apparatus and method for detecting electromagnetic interference, or noise that may disrupt the proper operation of medical devices implantable in patients, such as cardiac stimulation including pacemakers and defibrillators. The electromagnetic interference detector is implantable within a patient and includes a receiver whereby electromagnetic interference signals are received, an antenna which is part of the receiver, and a signal detector that detects the presence of the received interference signals, the detector being independent of any other circuitry of the implantable medical device. The apparatus of Paul is directed only to a detector of electromagnetic interference. After detection of such interference, a signal is output to a noise detector on a medical device.

Rejections Under 35 U.S.C. § 112

Although applicant traverses the rejection of claims 2-4 under 35 U.S.C. §112, claim 2 has been amended to correct inappropriate claim format not related to patentability. The present application is a national stage of an international application where such claim format is proper. The narrowing language, the phrase "preferably about 7 MHZ" has been removed from claim 2 in order to ensure its compliance with practice before the United States Patent Office. While the claim format was improper,

an amendment to correct its format is not one related to patentability and one of ordinary skill in the art would understand the scope of the claim.

Further, and as indicated by the examiner, this is not a narrowing amendment as it is a narrowing feature is being removed from claim 2, thus making it a more broad claim. The phrase has been added to new claim 12. Reconsideration of the rejection is respectfully requested.

Rejections Under 35 U.S.C. § 103

Reconsideration is requested of the rejection of claims 1, 10 and 11 over U.S. Patent 6,016,449 to Fischell et al. in view of U.S. Patent 5,697,958 to Paul et al. Claims 2-9, and 12 depend from claim 1 and although not subject to the rejection under 35 U.S.C. §103, are patentable by their dependence on claim 1. Fischell is designed to detect neurological activity in specific areas of the brain through electrodes and relay the information to a control module. As such, the electrodes are designed to detect neurological activity at a low level threshold, operating at levels not exceeding the mW level. As stated in the background of Fischell, such a system is not suitable for use as cardiac defibrillators which "are significantly simpler and certainly different from the requirements of a device to detect and treat an impending epileptic seizure", such as defibrillators operating at a higher power range. See col. 1, line 55 to col. 2, line 3 of Fischell.

Paul similarly is directed to an apparatus and method for detecting a signal (electromagnetic interference) which may disrupt the proper operation of the medical device implanted in a patient, such as a cardiac defibrillator.

Fischell and Paul are not properly combinable to obtain the claimed invention. Whether or not disclosures in two prior art references are properly combinable depends, generally on whether there is some teaching or suggestion in those references or elsewhere in the prior art to suggest the desirability of making the combination. The mere fact that it is possible to find two isolated disclosures having some individual features that might be combined in a manner that would result in the claimed invention

is not enough. There must be something in the prior art itself that suggests the desirability of that claimed combination. It is improper to pick and choose among the individual parts of various prior art references as a mosaic to create a facsimile of the claimed invention using the inventor's disclosure as an instruction book on how to reconstruct the prior art. To do so is impermissible hindsight reasoning. Additionally, the problem confronted by the inventor must be considered in determining whether it would have been obvious to combine the references in that manner to solve a particular problem. See *In re Fine*, 5 USPQ2d 1596, 1699 (Fed. Cir. 1998).

In the present case, Fischell discloses a system for detecting neurological disorders in selected portions of the brain. Fischell further teaches that the requirements for detection and treatment of ventricle fibrillation are significantly simpler and different from the requirements for a device to detect and treat an impending epileptic seizure. See col. 1, lines 59-63 of Fischell. Because Fischell teaches that the apparatus disclosed therein is improper to use in cardiac applications, one would not look to combine Fischell with Paul. The combination is therefore improper as Fischell expressly teaches away from such a combination.

Furthermore, even if Fischell and Paul were combinable, the combination does not anticipate or render obvious claim 1 as neither Fischell nor Paul operate at a power level suitable to be an apparatus for cardiac defibrillation as claimed. Both Fischell and Paul are directed to detection of electrical activity and as such the RF energy involved is confined to powers not exceeding the mW level. The combination of the two detection systems operating at low wattage levels therefore cannot be combined to anticipate or render obvious an apparatus for cardiac defibrillation.

Ser. No. 09/980,971
Amdt. dated October 21, 2004
Reply to Office action of April 21, 2004

Enclosed is a Petition for Three-Month Extension of Time with the required fee.
Please apply any charge or credits to deposit account 50-1721.

The application is considered to be in condition for allowance and such action is solicited.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Mark E. Baron', with a long horizontal flourish extending to the right.

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